CEN-TECH® DIGITAL PHOTO SENSOR TACHOMETER

Model 66632

SET UP AND OPERATING INSTRUCTIONS



Distributed exclusively by Harbor Freight Tools $^{\mbox{\scriptsize B}}.$

3491 Mission Oaks Blvd., Camarillo, CA 93011

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Read this material before using this product. Failure to do so can result in serious injury. SAVE THIS MANUAL.

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For technical questions or replacement parts, please call 1-800-444-3353.

SPECIFICATIONS

Display	LCD 5 Digits
RPM Range	6 - 99999 RPM
Accuracy	± 0.05% plus 1 RPM
Power Source	(4) 1.5 VDC (AA) Batteries (not included) or AC adapter (not included)
Operating Environment	32° - 104° F, < 85% Humidity

UNPACKING

When unpacking, check to make sure that the item is intact and undamaged. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this document as soon as possible.

IMPORTANT SAFETY INFORMATION

- 1. When in use, this tool is near rotating parts.
- 2. Do not touch rotating parts. Do not wear loose clothing when working with rotating parts. Contain hair, jewelry and any item that may become entangled in rotating part.
- 3. This product is not a toy. Do not allow children to play with or near this item.
- 4. Position batteries in proper polarity and do not install batteries of different types, charge levels, or capacities together.
- 5. Use as intended only.
- 6. Inspect before every use; do not use if parts are loose or damaged.
- 7. Always wear ANSI approved safety goggles when working.
- 8. Maintain product labels and nameplates.
 These carry important safety information.
 If unreadable or missing, contact Harbor
 Freight Tools for a replacement.

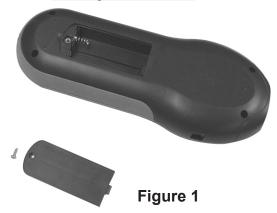


Read the IMPORTANT SAFETY INFORMATION above before set up or use of this product.

SET UP

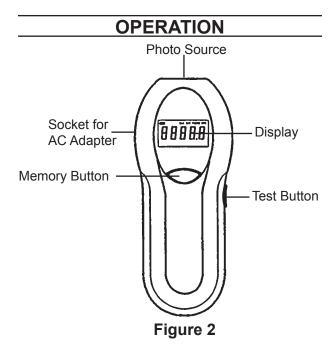
Before first use, remove the clear protective covering from face of Display.

Battery Installation



Before use or when the Low Battery Indicator Symbol appears (See Figure 4, page 3), install (4) new 1.5 VDC "AA" batteries (not included).

- 2. To install batteries, remove Screw and Battery Cover on back of Tachometer.
- 3. Install 4 "AA" batteries in battery compartment. Be sure to match polarity of batteries to markings inside battery case.
- 4. Replace Battery Cover and Screw. Do not overtighten.
- 5. Whenever the Low Battery Indicator appears, replace the batteries.
- 6. Do not short the battery terminals together when replacing batteries.
- Do not dispose of old batteries in fire.
 Always dispose of batteries in accordance with guidelines provided by local authority.
 Note: This tool may be used with AC power.
 Plug adapter (not included) into adapter
 Socket and into a 120 VAC outlet.



1. Cut a 3/4" length of reflective tape (included), peel off the backing and attach the reflective tape to the object to be measured.

Note: The longer the piece of reflective tape, the easier it is to make the measurement.

- 2. Point the Tachometer's Photo Source at the reflective tape on the object, holding the tool approximately 2" to 8" away.
- 3. Start the object turning.

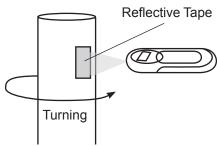


Figure 3

- 4. Press and hold the Test Button, keeping the beam of light perpendicular to the reflective tape surface.
- After several seconds, a reading will appear on the Display. When the reading is stable, or near stable, note the reading on the Display and then release the Test Butoon.

Note: If the reading fails to appear, adjust the Tachometer's angle so that it is perpendicular to the reflective tape on the object and/or

- adjust the distance between the Tachometer and the reflective tape.
- 6. After the test button is released, the maximum, minimum and last readings of the measurements are stored.



Symbol Key

Low Battery Indicator:
-Batteries are low and need replacing
MAX Maximum reading is displayed
MIN Minimum reading is displayed
PHOTO Photoelectricity mode symbol
RPM Revolutions per minute (RPM)

Figure 4

 To access the readings, press and release the Memory Button repeatedly to cycle through the readings on the Display. The indicators above the digits will appear as described in Figure 4.

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS DOCUMENT AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

LIMITED 90 DAY WARRANTY

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.